



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,498	02/22/2002	Shigeru Hosoe	02860.0707	9353

7590 05/06/2004

FINNEGAN, HENDERSON, FARABOW,
GARRETT AND DUNNER
1300 I Street, N.W.
Washington, DC 20005

EXAMINER

LOPEZ, CARLOS N

ART UNIT PAPER NUMBER

1731

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/079,498	Applicant(s) HOSOE, SHIGERU	
	Examiner Carlos Lopez	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/18/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 22-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

After further consideration the previously indicated allowability of claims 1-21 on 4/9/04 is withdrawn. Rejections of the claims follow.

Election/Restrictions

Applicant's election of claims 1-21 on 12/18/03 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

The disclosure is objected to because of the following informalities: In the summary of the invention, through out pages 8-48 of the specification, applicant refers to a plurality of numerals such as "optical element described in (1-14)" or "mol die described in 2-2", but does not provide any further descriptions as indicated.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

1) Claims 10-16 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how the protrusion/hollows and its effect on the optical element further structurally limit the claimed mold die.

Art Unit: 1731

It is unclear if the amorphous alloy recited in claim 21 includes at least one or all the elements recited therein.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2) Claim 1 rejected under 35 U.S.C. 102(b) as being anticipated by Kashiwagi et al (US 5,700,307). Kashiwagi discloses a die for press molding optical elements. The die comprises a cutting layer 12 made of an amorphous alloy, which is deemed as the claimed die base body (Example 5, Column 17, lines 39ff). The mold die comprises a mold die face formed by placing a layer 11 onto cutting layer.

3) Claims 1, 3, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Umetani (JP 06-144850). Umetani discloses a die for press molding optical elements. The die comprises a layer 12 made of an amorphous alloy, which is deemed as the claimed die base body (See machine translation of abstract). The mold die comprises a mold die face 14 which is formed by cutting work process of layer 12 to form the shaped faced 14 (See machine translation of abstract).

4) Claims 1, and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Umetani (JP 06-186755). Umetani discloses a die for press molding optical elements. The die comprises a layer 12 made of an amorphous alloy, which is deemed as the claimed die base body (See machine translation of claim1). The mold die comprises a mold die face 14 which is formed by cutting work process of layer 12 by a diamond cutting tool to form the shaped faced 14 (See machine translation paragraph 14).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5) Claims 2-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kashiwagi et al (US 5,700,307) It is noted that claims 2-8 are being treated as product by process limitations. As noted in MPEP 2113:

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product

Art Unit: 1731

of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

In the instant case the claimed process as recited in claims 2 and 6-8 are deemed to not add further structural limitations to the mold dies of the above references. Alternatively, even if its deemed that the process limitation do further add structural limitations, it would have been obvious to a person of ordinary skill in the art at the time the invention was made that said processes do not further impart structural elements that are patentably distinctive from the mold dies of the Kashiwagi and Umetani references.

6) Claims 2 and 5-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Umetani (JP 06-144850). It is noted that claims 2 and 5-8 are being treated as product by process limitations. As noted in MPEP 2113:

“[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

In the instant case the claimed process as recited in claims 2 and 6-8 are deemed to not add further structural limitations to the mold dies of the above

Art Unit: 1731

references. Alternatively, even if its deemed that the process limitation do further add structural limitations, it would have been obvious to a person of ordinary skill in the art at the time the invention was made that said processes do not further impart structural elements that are patentably distinctive from the mold dies of the Kashiwagi and Umetani references.

7) Claims 2 and 6-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Umetani (JP 06-186755). It is noted that claims 2 and 6-8 are being treated as product by process limitations. As noted in MPEP 2113:

“[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

In the instant case the claimed process as recited in claims 2 and 6-8 are deemed to not add further structural limitations to the mold dies of the above references. Alternatively, even if its deemed that the process limitation do further add structural limitations, it would have been obvious to a person of ordinary skill in the art at the time the invention was made that said processes do not further impart structural elements that are patentably distinctive from the mold dies of the Kashiwagi and Umetani references.

8) Claims 9-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwagi et al (US 5,700,307) or Umetani (JP 06-144850) or Umetani (JP 06-186755) in further view of Kashiwagi et al (US 5,405,652). The Kashiwagi and Umetani references are silent disclosing a die face mold having a plurality of protrusions, which would consequently be formed on the optical element. However, as taught by Kashiwagi, protrusions are made onto the mold die face to form a corresponding protrusions on the optical element in order to mass produce, with high accuracy and reliability, optical elements with grooves (Abstract and col. 1, lines 35-39). Thus at the time the invention was made it would have been obvious to a person of ordinary skill in the art to have provided protrusions on the mold die of Kashiwagi and Umetani references in order to have a resultant optical element with a corresponding protrusions in order to mass produce, with high accuracy and reliability, optical elements with grooves as taught by Kashiwagi.

In regards to claims 10-16, since the mold die derived from the teachings of Kashiwagi and Umetani references have the claimed hollow/protrusions, the claimed effects on the optical element would be expected.

As for claims 19 and 21, the cutting layer includes palladium and nickel (Col. 9, lines 43ff).

In regards to claims 17-18, the claimed amorphous alloy base of Kashiwagi and Umetani references would require a sufficient hardness as that claimed ^{by} applicant in order to provide a durable mold die.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9) Claims 1-8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2-3 and 8 of copending Application No. 10/079496. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of copending Application No. 10/079496 recites the claimed mold die for an optical element having an amorphous alloy, which would have a die face for molding an optical element.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Art Unit: 1731

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References A-E, N, P and Q in PTO-892 have been cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



STEVEN P. GRIFFIN

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

CL